

Biology Faculty Awards



Lauren DeLong was just awarded a Fulbright Research/Study Grant to the Hochschule Bonn-Rhein-Sieg in Rheinbach, Germany and will pursue a Ph.D. in Biochemistry and Molecular Biology at Johns Hopkins University when she returns. She had to make the difficult decision to decline a DAAD Study Grant to get her Masters in Life Science Informatics at the University of Bonn in Germany, as well as admissions offers from several other Ph.D. programs. Since her freshman year, Lauren has been an active member of ASBMB and vivid presence in the Biology Department. Using her strong leadership skills, Lauren led multiple outreach activities focusing on genetics activities for elementary school students.

After exploring fermentation characteristics of wild yeast with Dr. L. Erickson, her immunology research project with Dr. Nyland contributed to her Honors thesis. During the summers, Lauren was an intern with the National Institutes of Health (NIH) and then worked in Rheinbach, Germany, as a DAAD Research Intern in Science and Engineering. Lauren has presented her research at three national conferences, including Experimental Biology and the Society for Toxicology annual meeting, and has served as an Honors Ambassador and supplemental instructor (SI) for both Molecular Genetics and Cell Biology. To recognize Lauren for all of her accomplishments and contributions to the department, Lauren is being recognized with an SU Biology Faculty Award.



Mollie Jewell is being recognized with the 2019 SU Biology Faculty Award in recognition of her outstanding achievements and contributions to the University and the Department of Biological Sciences. Mollie is an Honors student, Honors Ambassador, Honors Student Association officer (Secretary and Treasurer), American Society of Biochemistry and Molecular Biology (ASBMB) local chapter officer (co-President and Outreach Coordinator) and active member, BIOL 210 lab prep worker, and has conducted research in the Nyland lab for the past two years. As a member of the Nyland lab team, she has presented her research at local and national meetings including SUSRC and Experimental Biology.

She's currently finalizing her Honors thesis based on this research project. During the summer of before her junior year, Mollie was awarded the Gilman Scholarship to Scotland (Summer 2018) and spent the summer immersed in this experience. Despite personal tragedy and challenges, Mollie is fully engaged in the SU experience. She is a true citizen of the community and works tirelessly to support other students within the department and the university. She's an excellent student, mentor, and team player. We will miss Mollie and look forward to watching her continue to grow and shine in all her future endeavors!



Mariah Passwaters-Stamper is also being recognized with the 2019 SU Biology Faculty Award in recognition for her excellent achievements and contributions to Salisbury University and the Department of Biological Sciences. Mariah is an excellent student planning to attend graduate school with the ultimate goal of becoming a Physician Assistant. Already a Certified Nursing Assistant, Mariah has parlayed her passion for healthcare into activities here at SU and within the Salisbury community. Specifically, she has served as a peer health educator including planning interesting (and fun) events on campus. Mariah has been an active member of the local ASBMB chapter and taken full advantage of the opportunity to help with STEM outreach to local middle school children.

She has conducted research in the Nyland lab and been a great team player for her lab-mates. This research experience culminated in a very well written review paper that she and Dr. Nyland plan to submit for publication soon. Mariah has been a supplemental instructor (SI) for both Cell Biology and Biology Concepts and Methods. She is engaged and friendly in that process; the students value her support and advice and I hear nothing but great things. Finally, Mariah is an International Student Ambassador and has been motivated to enhance her conversational Spanish in order to better communicate lab safety issues to some of the staff at SU for whom English is a second language. We will miss Mariah's kind and generous heart along with her inquisitive and intelligent mind, and we look forward to cheering on all her future success!



From left to right; Mariah Passwaters-Stamper, Mollie Jewell, Dr. Nyland's daughter Emma, Lauren DeLong and Dr. Nyland at Biology Honors Night.

Biology Alumni



Robyn Larkin (née Bungay) with His Royal Highness, The Prince of Wales

When I graduated from Salisbury in May 1998, I had no idea what experiences awaited me in my career. I was ready to see a bit of the world and gain experience with my shiny new degrees in Biology and Environmental/Marine Science earned through the dual degree programme. Through several internships during my years at SU (then SSU), I found my true passion: environmental education. I loved interacting with and teaching people about ecology, the environment, and specifically the ocean. I spent time in Paraguay with the Peace Corps, and I worked on the startup teams for both the Aquarium at Moody Gardens (Galveston, TX) and the Oklahoma Aquarium (Jenks, OK), developing educational programming at each of those facilities. And while I loved my time in Oklahoma, I missed the ocean. I often joke I have salt water running through my veins.



So when an offer from Dolphin Quest in Bermuda came my way in 2002, I couldn't pass it up. Even if I did it for a year. I sold everything I owned and moved to a 21 square mile island in the Atlantic to work on developing the company's local education programmes. Talk about living a dream! A couple highlights of my job in Bermuda included witnessing the birth of six dolphin calves in our care and my participation in field research supported by my employer. Our team tagged offshore bottlenose dolphins that lived around the Bermuda Pedestal, tracked their geographic movements around Bermuda, and recorded their dive behaviours (2003-2005).

<https://dolphinquest.com/scientific-studies/bermuda-wild-dolphin-project/>

My husband's job transferred him to the Cayman Islands in 2009 in the middle of the economic crisis. After seven years in Bermuda, we said goodbye to one island and hello to another. We have now been living in Cayman almost 10 years and have status as permanent residents. Thankfully, my adventures in the field of marine/environmental science continued. Upon arriving to Cayman, jobs in my field were impossible to come by, so I spent a couple years utilizing my organizational and planning skills as a project manager for the Cayman Islands Tourism Association and Cayman Finance. I fed my passion for the ocean by volunteering with the Department of the Environment's sea turtle monitoring programme.

As this is a small island, I know a lot of people. I regularly see and chat with Guy Harvey (<https://www.guyharvey.com/ocean-foundation>) and Cathy Church (<http://www.cathychurch.com>), swim with stingrays, and I even met the late Dr. Eugenie Clark (the Shark Lady) at her induction into the International Scuba Diving Hall of Fame (2010).

For the last 1 ½ years, I've worked as project manager for the Central Caribbean Marine Institute (CCMI). We have a field research station in Little Cayman, one of the most amazing places to visit for those who love to dive. The Bloody Bay Wall is an incredible diving experience that I highly recommend. While my work is primarily office-based, I use my passion for the ocean to promote and support CCMI's efforts to unlock the secrets of coral resiliency and aid in coral restoration efforts.



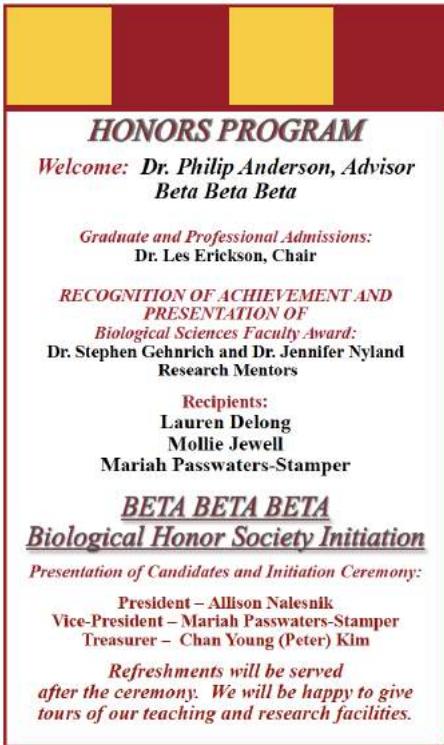
And my adventures are not stopping anytime soon. Just last month, we had a special visitor to the Cayman Islands and specifically CCMI – His Royal Highness, The Prince of Wales. Because of my background in marine education, I was asked to present a demonstration on coral bleaching for HRH. This was a moment I never imagined in my life when I was a student in Salisbury. I somehow ended up living my dream life – a tropical island, spending time with sea turtles and stingrays, running marathons (where you see the occasional penguin!), working in a job I am passionate about, and even meeting the future King of England!

Dr. Kayla Pennerman



Biology alumna, Kayla Pennerman successfully defended her PhD dissertation at Rutgers University on April 3rd. The title of her dissertation was *Effects of Volatile 1-Octen-3-ol and Strain Genetics on Mycotoxin Production*. In June she will start a Postdoc at the US Department of Agriculture in Athens Georgia. Kayla will study the role of denitrification on survival and mycotoxin production by *Fusarium* and attempt to identify denitrification inhibitors that could be used as fertilizer additives. We are all very proud of Kayla's accomplishments!

Honors Night



HONORS PROGRAM

Welcome: Dr. Philip Anderson, Advisor
Beta Beta Beta

Graduate and Professional Admissions:
Dr. Les Erickson, Chair

RECOGNITION OF ACHIEVEMENT AND PRESENTATION OF
Biological Sciences Faculty Award:
Dr. Stephen Gehrich and Dr. Jennifer Nyland
Research Mentors

Recipients:
Lauren Delong
Mollie Jewell
Mariah Passwaters-Stamper

BETA BETA BETA
Biological Honor Society Initiation

Presentation of Candidates and Initiation Ceremony:

President – Allison Nalesnik
Vice-President – Mariah Passwaters-Stamper
Treasurer – Chan Young (Peter) Kim

Refreshments will be served
after the ceremony. We will be happy to give
tours of our teaching and research facilities.

BETA BETA BETA
Lambda Psi Chapter Initiates,
2019:

Shania Anne Bailey
Kathryn Ruth Broen
Julie Anne Broomell
Erin Elizabeth Freeman
Courtney Nicole Hammond
Tehzeeb Malik Hassan
Carley Sydney Jones
Jenna Elaine Lepus
Timothy Moran
Abigail Rose Nalesnik
Reilly Saneman
Sheridan Sargent
Ayisha Sohail
Ryan Christopher Spadin
Katlynne Tatterson
Logan Jennings Hall Thomas
Gabrielle Elizabeth Voithofer



Gabrielle Voithofer with her
proud Mom!



On May 1, to support the local chapter of Women Supporting Women, students collected in Red Square, paid to encrust their frustrations in a whipped cream pie, and transferred that frustration right into the faces of their favorite faculty. Picutred faculty from the Department of Pie-ological Sciences are Victor Miriel (left) and Michael Carter (all) and David Keifer (right) from the Chemistry Department.



After Graduation 2019

Lauren DeLong is spending next year on a Fulbright Research/Study Grant to Hochschule Bonn-Rhein-Sieg in Rheinbach, Germany. Lauren will continue on to do a Ph.D. in Biochemistry and Molecular Biology at Johns Hopkins University.

Alexis English will be working for Delaware Sea Shore State Park as a Park Naturalist. Will be running a lot of programs as well as research projects.

Rachael Faust has been accepted into the Environmental Biology Graduate Program at Hood College. She also has a Summer Internship working with DNERR in Microplastic Research

Corinne Greenlees is graduating with a dual major in Biology and Medical Laboratory Science. She has accepted a position at Johns Hopkins Hospital as a Clinical Laboratory Scientist in their Microbiology department.

Michael Markman has been accepted into Georgetown University's Masters in Biotechnology Program, BioBusiness Track.



Alessandra-Anna Micheli will be attending Salisbury University for Second Degree in Nursing.

Ryan Nevins will be interning at Lonza

Colby Payne: will be attending the Pharmacy program at University of Maryland Eastern Shore.

Amanda Rocker was accepted into the Biology Master's Program at Salisbury University. Amanda will be studying Turtles for Conservation of Species in the Delmarva Region with Dr. Eric Liebgold as her advisor.

Morgan VonSchmidt: was accepted into the Traditional Optometry Program at Salus University in Pennsylvania.

Past Graduates



Annelise Beer, who minored in Biology (Dec 2018 grad), has just been accepted into the MS in Human Paleobiology program at George Washington University. She 3D-printed a skeleton from a Bronze Age infant jar burial. Here she is giving a talk to her hometown chapter of the Archeological Society of Maryland.

Nathan Hirtle (Dec 2017 grad) has been accepted to the SUNY at Stony Brook Graduate School's Marine & Atmospheric Science MS Graduate Program for Fall 2019. He will be working in the lab of Dr. Lesley Thorne, studying foraging ecology of predators.

Andrew Jones (Dec 2017 grad) will be attending the Master's program at Indiana University O'Neill School of Public and Environmental Affairs in Bloomington in Fall 2019 with a generous graduate fellowship. He was accepted by all four graduate schools he applied to.



Jenny Kneas has been accepted into the Integrated Biosciences Program at North Carolina Central University.

Audrey Ramming, right (May 2018 graduate), has just been accepted into the MA program in Climate and Society at Columbia University, while **Navin Vijayarangan**, left, is finishing up a MS in Systems Biology at Georgetown University.



Salisbury University Student Research Conference 2019



Dr. Jessica Clark won the Outstanding Research Mentor Award for 2019! Presenting the award is Dr. Dr. Clifton P. Griffin, Dean, Graduate Studies & Research.

Lor Dabaj presenting: Soundscape of Frog Choruses in Panama: An Analysis of Acoustic Structure

Oral Presentations

Shania Bailey: ChIP-Seq Analysis for myc proto-oncogene in Human Cancer Cells. Mentor – Philip Anderson

Eagan Chaudhry: Pond for Four: Dietary Niche Overlap and Potential Partitioning Between the Endangered Spotted Turtle and Other Turtle Species. Mentor – Eric Liebgold

Lor Dabaj, Sara Nickoles & Derek Coss: Soundscapes of Frog Choruses in Panama: An Analysis of Acoustic Structure. Mentor – Kimberly Hunter

Courtney Hammond: An Analysis of Nutrient Concentration and Marine Signaling in a Freshwater Ecosystem Pre- and Post-removal of Dams. Mentor – Christina Bradley

Garrett Hansen: Comparing Total Mercury Concentration (THg) and Trophic Position in Wild-Caught and Commercially Farmed Cobia (*Rachycentron canadum*) Using Stable Isotope Analysis.
Mentor – Christina Bradley

Ryan Joyce & Tyler Stack: A Novel Metabolic Pathway for L-Ascorbate by the Bacterium *Ralstonia eutropha* H16.
Mentor – Michael Carter

Denise Manole: Ants of Assateague Island: An Examination of Feeding Preferences, Trophic Level, and Biodiversity.
Mentor – Dana Price

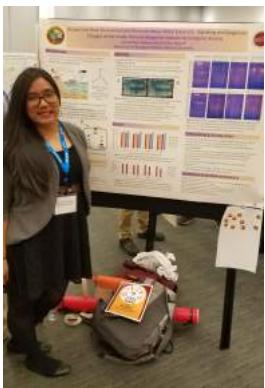
Brandon Norman: Translational Fusion of a G-protein Coupled-Receptor from the Hookworm *Ancylostoma ceylanicum* Expressed in *Caenorhabditis elegans*. Mentor – Patti Erickson

Peyton Reynolds & Loren Jones: The Effect of DHA on B16 Cells. Mentor – Eugene Williams

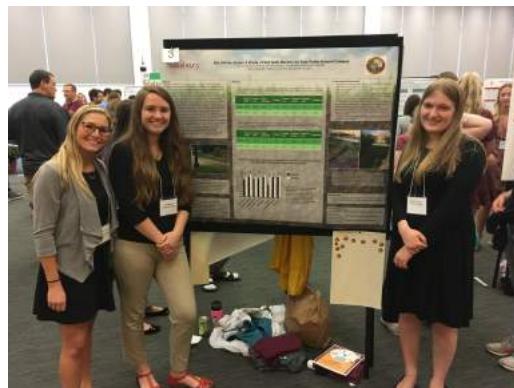
Morgan Tibbo & Gabrielle Voithofer: Sensory Changes Following Hyperglycemic Induction in *Danio rerio*.
Mentor – Jessica Clark

Gabrielle Voithofer: Peripheral Nerve Degeneration Following Hyperglycemic Induction with 120 mM Glucose.
Mentor – Jessica Clark

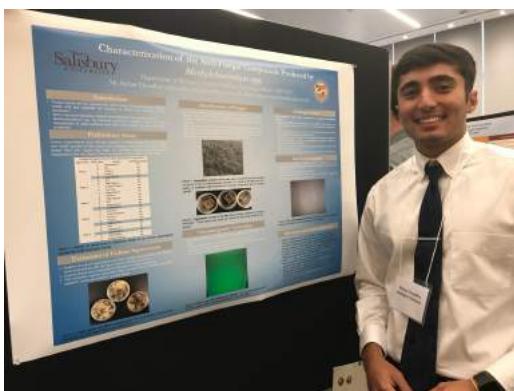
Poster Presentations



Jeremie Rose Barbosa: Human Low-Dose Environmentally Relevant Heavy Metal Exposure: Signaling and Epigenetic Changes of the Innate Immune Response Induced by Inorganic Arsenic. Mentor – Jennifer Nyland



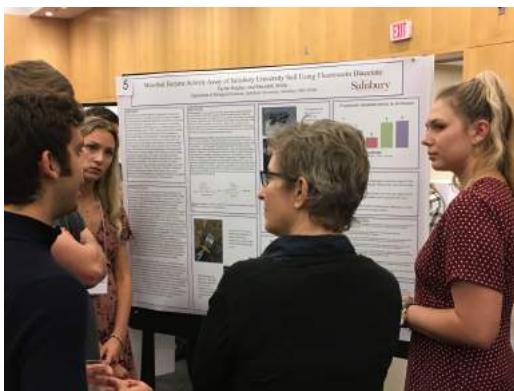
Emily Bowdle, Rebecca Gordon & Sarah Murphy: Get Off the Grass!: A Study of Soil Bulk Density on Foot Paths Around Campus. Mentor – Christopher Briand



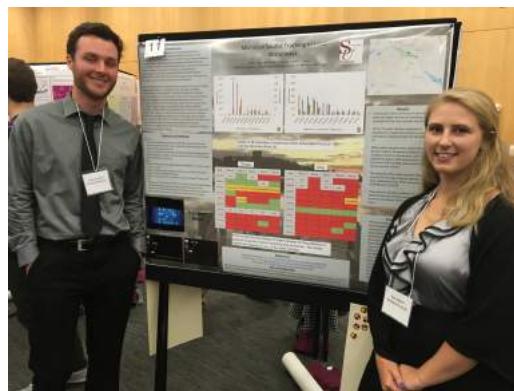
Rehan Choudhry: Characterization of the Anti-Fungal Compounds Produced by *Methylobacterium* Species. Mentor – Mark Holland



Christina Day, Kevin Auerbach & Arella Hill: The Human Touch of Scientific Illustration: A Guide to the Maryland Dynastiae. Mentor – Dana Price



Taylor Hughes & Merideth Miller: Microbial Enzyme Activity Assay of Salisbury University Soil Using Fluorescein Diacetate. Mentor – Elizabeth Emmert



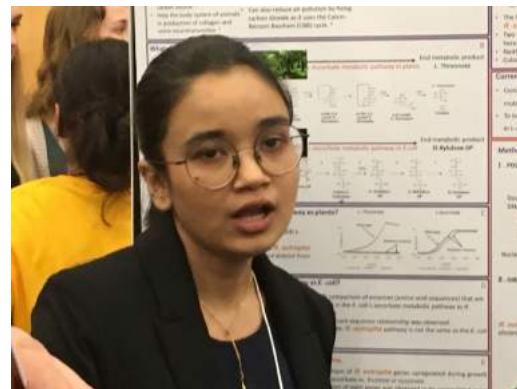
Trevor Johnson & Kara Ogburn: Microbial Source Tracking in Local Waterways. Mentor – Mark Frana

HENSON SCHOOL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF BIOLOGICAL SCIENCES

May 2019
Newsletter

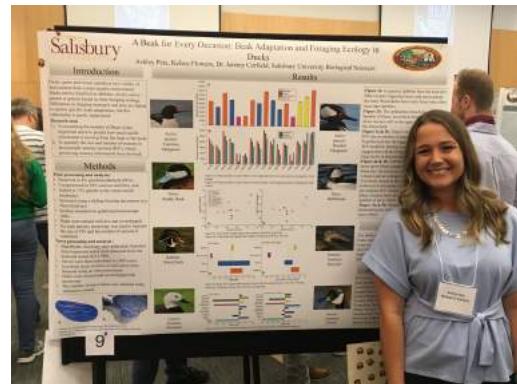


Sarah Lundfelt: Redescription and New Host Records for *Capsalooides cornutus* (Verrill, 1875, Price, 1938) in Gills of Two Istiophorid Billfishes from the Western Atlantic Ocean.
Mentor – Ann Barse

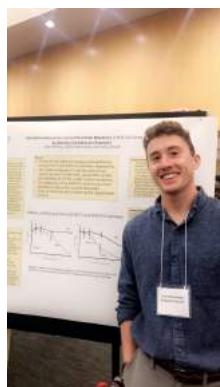


YadanarThan Naing: Analyzing a Unique L-Ascorbate Metabolic Pathway in *Ralstonia eutropha*. Mentor – Michael Carter

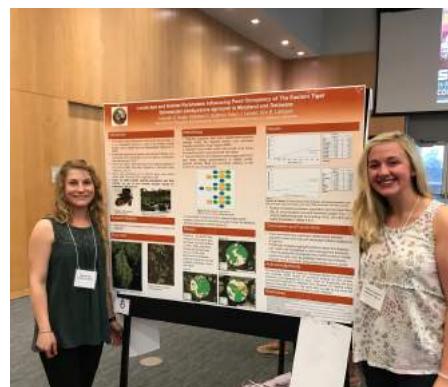
Allison Nalesnik: Understanding How Temperature Impacts the Isotopic Composition of *Galaxea* Coral.
Mentor – Christina Bradley



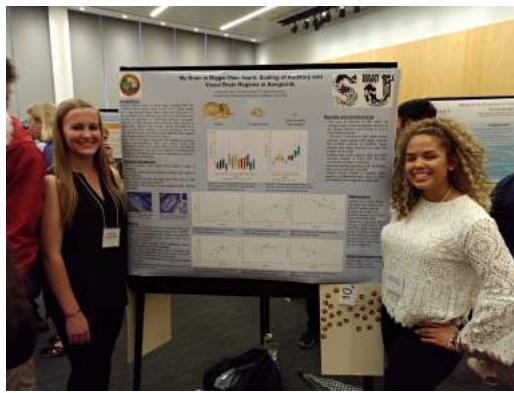
Ashley Pete: A Beak for Every Occasion: Beak Adaptations and Foraging Ecology in Ducks. Mentor – Jeremy Corfield



Jared Shemonsky & Zaikey Powell: Does Docosahexaenoic Acid (DHA) Inhibit Metastasis in B16 Cell Lines by Altering Cell Adhesion Potentials and Cell Motility? Mentor – Eugene Williams



Hannah Small & Kathleen Stafford: Landscape and Habitat Parameters Influencing Pond Occupancy of the Eastern Tiger Salamander (*Ambystoma tigrinum*) in Maryland and Delaware. Mentor – Eric Liegold



Jamie VanWyk & Caroline Copes: My Brain's Bigger Than Yours: Scaling of Auditory and Visual Brain Regions in Songbirds. Mentor – Jeremy Corfield



Courtney Hammond

Recently, I was awarded the Udall Scholarship which is a nationally competitive scholarship that awards college sophomores and juniors for leadership, public service, and commitment to issues related to Native American nations or to the environment. I applied under the environment category due to my interest in environmental issues through an interdisciplinary lens. The scholarship offers scholarship money but also opens you to a portal of diverse individuals pursuing a wide range of environmental issues from different sectors. I will be attending the scholarship orientation in August where I will fly out to Tucson, Arizona and spend a week networking and attending a wide range of workshops.

Here a link to more information about the scholarship:
<https://udall.gov/ourprograms/scholarship/scholarship.aspx>



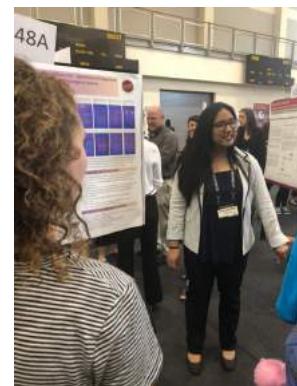
During the summer, I also will be participating in the SURFO (Summer Undergraduate Research Fellowship in Oceanography) program at University of Rhode Island. It is a 10-week program designed “primarily for science, math and engineering students who will have just completed their junior year of undergraduate coursework”. The program focuses on developing research skills through laboratory work, data analysis, instrumentation development and dynamical modeling. Similar to that of an REU, it is funded by NSF and I will be working with a faculty mentor(s) and conducting research in their lab. I will be working under Dr. Susanne Menden-Deuer and Dr. Heather McNair to study carbon to volume relationships for dinoflagellates, diatoms and other protist plankton.

About the SURFO program: <https://web.uri.edu/gso/academics/surfo/>

National Conference on Undergraduate Research (NCUR) April 2019, Kennesaw, Georgia



Karsin Bachran: Feeding and Pupation Ecology of Frosted Elfin Caterpillars (*Callophrys irus*)



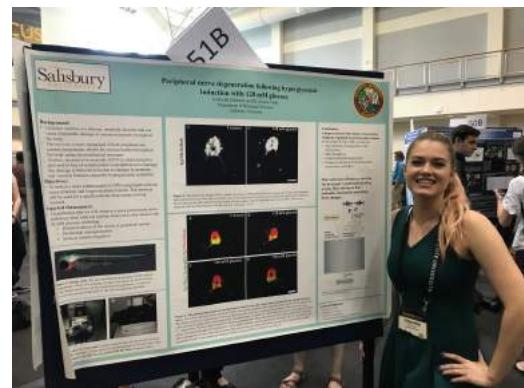
Jeremie Rose Barbosa: Human low-dose environmentally-relevant heavy metal exposure: Signaling and epigenetic changes of the innate immune response induced by inorganic arsenic



Kara Ogburn & Trevor Johnson:
Microbial Source Tracking in Local
Waterways

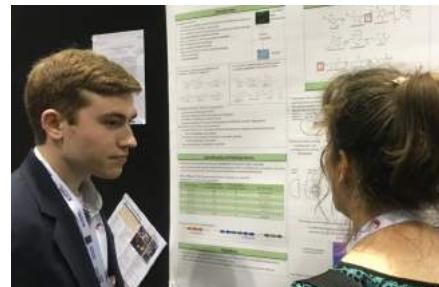
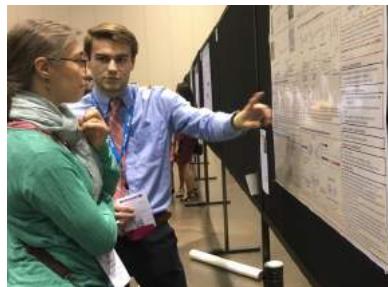
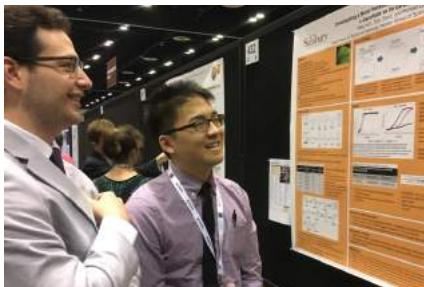


Morgan Tibbo: Sensory changes
following hyperglycemic induction in
Danio rerio

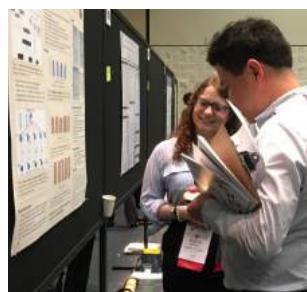
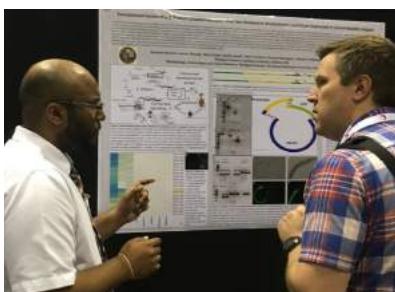


Gabrielle Voithofer:
Peripheral nerve degeneration following
hyperglycemic induction in juvenile zebrafish
(*Danio rerio*)

American Society for Biochemistry and Molecular Biology Meeting April 2019, Orlando, Florida

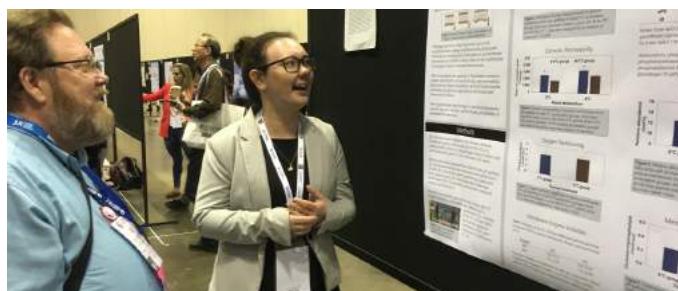


Peter (Chan) Kim (left), Brendan Wille (center), and Ryan Joyce (right), who work with Michael Carter, present data to attendees at the conference. Each student's data pieces together the identification and characterization of a novel metabolic pathway for the degradation of L-ascorbate (vitamin C) in bacteria.



Brandon Norman (left) presents his poster exploring possible signaling mechanisms in hookworms to Dr. Carter (right).

Mollie Jewell (left) describes her data addressing a relationship between immune responses to environmental mercury.



SU Biology alumna Amanda Biederman (right) explains her doctoral thesis project involving thermal acclimation of artic fish to her former mentor, Dr. Williams (left).

Biology Students visit Macrogenics, Rockville MD

SU students from ASBMB and several classes learned about biotechnology applications and careers while visiting Macrogenics and the J. Craig Venter Institute (JCVI) in Rockville, MD in April. Macrogenics' scientists explained their pipeline of antibody-based, anti-cancer pharmaceutical development, from discovery and customization, through clinical testing, to large-scale manufacturing. The group was hosted at lunch by Macrogenics employees, including specialists in research and development, quality control, quality assurance and manufacturing.



Gundo Diedrich, PhD, (middle), Associate Director of Research at Macrogenics, in Rockville, MD, explains to Sumner Cornacchia (left) and Colin Cassidy (right) how B cells expressing antibodies against cancer targets are sorted.



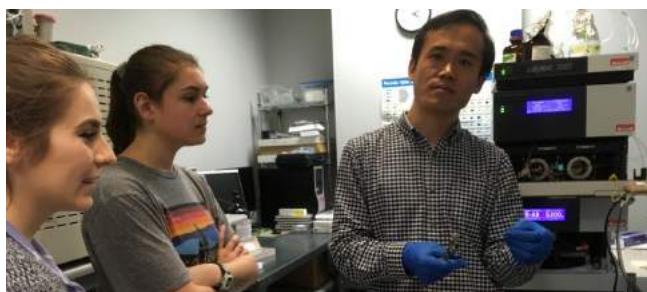
David Kahn, PhD, Vice President, Bio Pharmaceutical Development (right) explains how high performance liquid chromatography (HPLC) is used to separate the expressed antibodies from impurities in the cell culture medium. (Left to right: Madi Jermain, Ashley Brodell, Stephanie Miller, Sumner Cornacchia, and Colin Cassidy.)



Madi Jermain (left) and Ashley Brodell (right) view the 2000-liter bioreactors used to manufacture custom antibodies for anti-cancer therapeutics at Macrogenics.

Biology Students visit the J. Craig Venter Institute, Rockville MD

At JCVI, Rembert Pieper (PhD) gave an introduction to the institute, including its impact on the fields of DNA sequencing, genomics, and microbiome studies. SU students also learned about synthetic biology approaches used in the group of Sanjay Vashee (PhD). Yong Yue (PhD) described his plasmid-based tracking system for microbial forensics and Roshan D'Souza (PhD) demonstrated nanopore DNA sequencing technology and explained how bacteriophage genomes can be manipulated to combat antibiotic-resistant bacteria. Harinder Singh (PhD) and Paolo Amedeo (PhD) discussed bioinformatics analyses comparing microbial populations between healthy individuals and those with leukemia or diabetes.



At JCVI Sumner Cornacchia (left) and Madi Jermain (middle) observe the nano-HPLC column used by Yanbao Yu, PhD, to separate proteins prior to mass spectroscopy analysis during proteomics experiments.



Madi Jermain (middle) before her first glimpse of the HeLa cells that inspired her to study biology, while Ashley Brodell (left) watches Suchi Chandran (PhD) (right) adjust the microscope.



Left to right (front row): Suchi Chandran, Nacyra Assad-Garcia, Patti Erickson, Roshan D'Souza, (middle row) Colin Cassidy, Stephanie Millier, Madi Jermain, Sumner Cornacchia, Ashley Brodell, (back row) Paolo Amedeo, Sanjay Vashee, Harinder Singh, Rembert Pieper

Featured in ASBMB TODAY



Past American Society for Biochemistry and Molecular Biology chapter President Lauren DeLong was recently featured in an article from the society's newsletter, ASBMB Today :

<http://www.asbmb.org/asbmbtoday/201902/News/JournalClub/>

SU Green Fund



Jeremy Malin along with **Drs. Xuan Chen & Dana Price**, received a grant for \$7,448.97 from the Salisbury University Green Fund for the project: Insect Diversity on Campus: Environmental Indicators.

Medical Careers Society – Franklin Institute



On Saturday, March 30, the SU Medical Careers Society visited Philadelphia. Students spent most of their time at the Franklin Institute exploring interactive exhibits on the heart, brain, electricity, and many others. Thank you MCS president, **Sydney Currie**, for organizing the trip!

Bees



The HONR 212 course on Honey Bees visited the SU bee hives to get ready for the arrival of new honeybees. The course is being taught by **Dr. Jessica Walter** from the Department of Exercise Science. The beehives, bee suits, and the bees were purchased with money from the **SU Green Fund**.

Harry (S)potter



Eaqan Chowdry, (MS candidate) just caught this Harry Potter cosplaying turtle, Harry (S)potter during his research.

Our Faculty

Jennifer Nyland's National Academies Presentation Buzz

Dr. Jennifer Nyland's presentation at the National Academies of Sciences, Engineering, and Medicine workshop "Toward Understanding the Interplay of Environmental Stressors, Infectious Disease and Human Health" (January 15-16, 2019) has gotten some press in the past few months. Workshop materials, such as links to presentation videos and presentation slides, are available at: <http://nas-sites.org/emergingscience/>. Her presentation "Mercury and Immune Modulation: is the inflammasome the key?" can now be viewed on YouTube: <https://youtu.be/UHBXPbReR5w> and was highlighted and quoted in the February edition of the e-newsletter magazine published by the National Institute of Environmental Health Sciences, Environmental Factor. That article, "Infectious disease and the environment – a two-way street" by Kelly Lenox offers a brief summary of the workshop and can be found here: <https://factor.niehs.nih.gov/2019/2/feature/2-feature-infectious-disease/index.htm>. Dr. Nyland was also interviewed for an article featured in the March 18th issue of Chemical & Engineering News, "Linking pollution and infectious disease: Chemicals and pathogens interact to weaken the immune system, reduce vaccine efficacy, and increase pathogen virulence" by Britt E. Erickson. That article can be found here: <https://cen.acs.org/environment/persistent-pollutants/Linking-pollution-infectious-disease/97/i11>.

Kim Quillin – Biological Science Textbook



Dr. Kim Quillin just published the seventh edition of her text book, Freeman et al. Biological Science. Dr. Quillin starting working on text books during graduate school in integrative biology at UC Berkeley. The text book consulting job was like a fun "paid hobby" that she did not expect to go anywhere (students, are you paying attention?).

But then while on the short list for a post-doc position at Horn Point Laboratory in Maryland to work with Evamaria Koch on seagrass meadow hydrodynamics, Dr. Quillin got a phone call from Scott Freeman (University of Washington, Seattle), asking her to partner with him to develop a new text book that would be less like an encyclopedia and more like a training manual for learning to think like a biologist.

That was 20 years ago. Scott Freeman retired from the project after the fourth edition to work on biology education research, so Dr. Quillin is now senior author working with a team of co-authors. She writes the evolution, animal diversity, and ecology chapters. Visit Dr. Quillin's office sometime to chat about career zig-zags, how text books are made, what YOU would like to see in a text book, or anything else related to biology and education. For example, why put a NEWT on the cover of the new edition?

Mary Gunther



As part of her work with the Zoo FLC instructor Mary Gunther was sent to Columbus Ohio March 28-29, to visit Otterbein University and the Columbus Zoo and investigate their dual programs. She learned a lot and got some really good ideas to design programs between SU and the Salisbury Zoo. She was also selected to be an Honors Faculty Fellow for Spring 2019 and will be using that opportunity to work on a collaborative course with the Salisbury Zoo on wildlife trafficking. If you would like to get involved with the zoo or in designing this course send her an email: MRGUNTHER@salisbury.edu

Publications

Liebgold EB, NM Gerlach, ED Ketterson. 2019. Density-dependent fitness, not dispersal movements, drives temporal variation in spatial genetic structure in dark-eyed juncos (*Junco hyemalis*). *Molecular Ecology* 28: 968-979.

Liebgold EB, Liebgold HL, Ransom MJ & Ransom TS. 2019. The spread of the parthenogenetic Mourning Gecko, *Lepidodactylus lugubris* (Duméril and Bibron 1836) to Paradise Island, The Bahamas, with comments on citizen science observations of non-native herpetofauna. *Bioinvasions Records* 8: 45-49.

Baby News!



Congrats to Krispen Laird!!!!

Keaton Bradley Laird was born at 10:12 am on April 17th weighing 8 lbs. 6 oz.

Mother and son are doing well!!!

Ellen Lawler – Ornithologist & Artist



Ellen Lawler (Professor Emeritus) will have a solo show in the Spotlight Gallery at the Ocean City Center for the Arts, 94th Street, Bayside, from June 7 through June 29. There is an opening reception for it and the other exhibits at the center on June 7 from 5-7 pm. In conjunction with the show, I will be teaching a workshop on “Painting Birds in Watercolor” at the OC Arts Center on Monday, June 10 from 9:30 to 3:30. Among the work I will be exhibiting there is “Hope is the Thing with Feathers”.

Ellen will have four paintings in a show about to start at the Ward Museum - “Skilled Service: The Volunteer Art Show” in the Welcome Gallery of the Ward Museum in Salisbury. It runs from April 19th - September 15th with a reception on June 14, 5-7pm. Among the paintings she'll have there are “Sorghum Social” and “Early Morning Light” – below.



Please join us for a
Retirement
Beach Bonfire
-honoring-
Dr. Judith Stribling



Saturday, September 28, 2019
6:00 pm- 10:00 pm
ASSATEAGUE ISLAND NATIONAL SEASHORE

Biology & Dual Degree Alumni, SU colleagues, and friends! Join us for an evening of memories and marshmallows as we celebrate the retirement of Dr. Stribling. Please bring your own picnic, beverages, blankets & chairs.

Park admission is FREE for this kid-friendly event.

Cake and speeches will be served at 7 pm.

For More Info & RSVP by 9/13/19: Visit our Facebook Invite at
<https://www.facebook.com/events/409018243231174/?ti=ia>

Or email Kerri at

kerri.bentkowski@gmail.com

Alumni Connection



SU BIOLOGY ALUMNI

Stay Connected !

We want to hear from you! Please let us know where you are living and what you are doing! We would love to hear from you. In the future we plan to have an Alumni Connection section in our newsletter.

Send information to: Sandra Ramses, Program Management Specialist
[SHRAMSES@SALISBURY.EDU](mailto:SRAMSES@SALISBURY.EDU)

Your Editorial Team

Drs. Chris Briand (editor) & Philip Anderson (co-editor).

Send any contributions to
chbriand@salisbury.edu



Featured Charity



Bananageddon: Change the System, Change the Story



Bananas available in the supermarket are all clones of the variety *Cavendish*, & are vulnerable to the fungus *Fusarium oxysporum* f. sp. *Cubense* Tropical race 4 (TR4). TR4 has devastated banana plantations in Asia & has now spread to Africa & Australia. IN the future, it will likely appear in Central America, where the majority of the bananas we eat come from.

Help us finish our film about the future of the banana

<https://www.kickstarter.com/projects/bananafilm/bananageddon-change-the-system-change-the-story>